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CC: "Scott Coffey" <[coffeyse@cdmsmith.com](mailto:coffeyse@cdmsmith.com)>  
Date: 7/3/2018 2:05:00 PM  
Subject: Methow sediment sampling vessel depth accuracy deviation

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Davis and Sean,

We have observed that on the Methow (replacement boat for the Tieton), the crew is using a lead line to measure the mudline depth at each stratified random sample location site and are only recording the depth to the nearest foot due to constraints on this type of measurement (river current, soft sediment bottom, difficulty in observing the tape from the elevated deck of the boat). In the surface sediment FSP, Appendix B-1 Horizontal and Vertical Control, under the section, Vessel Navigation and Equipment Operation, it states that: "Water depths are measured at each station using an Airmar ss510 survey sonar at the sampling point and confirmed daily with a lead line with reference to water surface. Vertical measurements will be recorded to the nearest 0.1 foot".

Julie Trump has brought this deviation from the FSP to their attention today and that we will be notifying EPA. I recommend that we request the PreRD Group change their lead line procedures on the Methow and have provided some example text for EPA to notify the PreRD Group below. I am available for a call if you need further information on this.

Ken,

It has come to EPA's attention that the replacement survey vessel, Methow, has been operating without a fathometer and been measuring mudline depths to the nearest foot using a lead line. EPA does not agree with this change from the approved FSP and requests that a fathometer reading +/- 0.1 foot accuracy or better be used on the Methow or an alternative method be proposed that meets the +/- 0.1 foot accuracy. In addition, please provide a list of samples that have been collected on the Methow and whether the depth accuracy for these samples will meet the data quality objectives. In the FSP, Appendix B-1 Horizontal and Vertical Control, under the section, Vessel Navigation and Equipment Operation, it states that: "Water depths are measured at each station using an Airmar ss510 survey sonar at the sampling point and confirmed daily with a lead line with reference to water surface. Vertical measurements will be recorded to the nearest 0.1 foot".

Thank you,  
Davis Zhen

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